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APPLICATION NO.	F	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/682,062		07/16/2001	Oscar Mora	38146	1261	
29569	7590	09/02/2004		EXAMINER		
JEFFREY		er.	PATEL, ASHOKKUMAR B			
253 N. MAIN STREET JOHNSTOWN, OH 43031				ART UNIT	PAPER NUMBER	
	•			2154 DATE MAILED: 09/02/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.



	App	olication No.	Applicant(s)	W/				
	09/	682,062	MORA, OSCAR	y r				
Office Action Summa	ry Exa	miner	Art Unit					
	Ash	ok B. Patel	2154					
The MAILING DATE of this cor Period for Reply	mmunication appears	on the cover sheet w	vith the correspondence addres	s				
A SHORTENED STATUTORY PERI THE MAILING DATE OF THIS COM Extensions of time may be available under the pro- after SIX (6) MONTHS from the mailing date of th If the period for reply specified above is less than If NO period for reply is specified above, the maxi Failure to reply within the set or extended period f Any reply received by the Office later than three n earned patent term adjustment. See 37 CFR 1.70	MUNICATION. Discommunication. Thirty (30) days, a reply within mum statutory period will appl or reply will, by statute, cause nonths after the mailing date o	In no event, however, may a the statutory minimum of thi y and will expire SIX (6) MO the application to become A	reply be timely filed rty (30) days will be considered timely. NTHS from the mailing date of this community. BANDONED (35.U.S.C. 8.133)) (nication.				
Status								
1) Responsive to communication(s) filed on <u>13 July 20</u>	<u>004</u> .						
2a)⊠ This action is FINAL .	2b)☐ This actio							
3)☐ Since this application is in cond	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
closed in accordance with the p								
Disposition of Claims								
4)⊠ Claim(s) <u>13-18</u> is/are pending i	n the application							
4a) Of the above claim(s)		um consideration						
5) Claim(s) is/are allowed.		in consideration.						
6) Claim(s) 13-18 is/are rejected.								
7) Claim(s) is/are objected	to							
8) Claim(s) are subject to r		tion requirement						
, , , , , , , , , , , , , , , , , , ,	ostriction and/or elec-	don requirement.						
Application Papers								
9) The specification is objected to								
10)⊠ The drawing(s) filed on <u>13 July</u>	<u>2004</u> is/are: a)⊠ acc	cepted or b) 🗌 objec	cted to by the Examiner.					
Applicant may not request that any			` ,					
Replacement drawing sheet(s) incl								
11)☐ The oath or declaration is object	ted to by the Examine	er. Note the attached	d Office Action or form PTO-15	52.				
Priority under 35 U.S.C. § 119								
12) Acknowledgment is made of a c a) All b) Some * c) None		ty under 35 U.S.C. §	§ 119(a)-(d) or (f).					
1. Certified copies of the pri		e been received.						
2. Certified copies of the pri			oplication No					
			received in this National Stage	0				
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* See the attached detailed Office		` ,,	received.					
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Attachment(s)								
1) Notice of References Cited (PTO-892)		4) 🔲 Interview S	Summary (PTO-413)					
2) Notice of Draftsperson's Patent Drawing Revi	ew (PTO-948)	Paper No(s	s)/Mail Date					
 Information Disclosure Statement(s) (PTO-14 Paper No(s)/Mail Date 	49 or PTO/SB/08)	5) Notice of Ir 6) Other:	nformal Patent Application (PTO-152)					
S. Patent and Trademark Office		-,						
TOL-326 (Rev. 1-04)	Office Action Su	ımmary	Part of Paper No./Mail Date 200	040819				

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DETAILED ACTION

1. Claims 13-18 are subject to examination.

Response to Arguments

- 2. Applicant's arguments filed July 13, 2004 have been fully considered but they are not persuasive for the following reasons.
- a. In response to Applicant's remark that "By the above amendment Applicants have amended the title to emphasize the novelty of the invention.", Examiner did not notice an amendment made to the title of the application.
- **b.** Although the Applicant has made a remark that "Also applicants have rewritten all claims to define the invention more particularly and distinctively so as to overcome the technical rejections and define the Invention patentably over the prior art.", no arguments pertaining to any specific prior art is provided, and as such no response is considered necessary.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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4. Claims 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Myer et al. (hereinafter Myer)(US 6,574,234) and White (6,002,669), and further in view of Flickinger et al. (hereinafter Flickinger)(US 4,354,226).

Referring to claim 13,

The reference Myer teaches networks including Ethernet networks with a plurality of control devices and having all control devices management functions executed by a computer means (Abstract). The reference also teaches the computer means sending a broadcast message and the control devices responding to the broadcast message. (col. 6, lines 55-67 and col.7, lines 1-9). The reference Myer teaches the controller and the computer means able to communicate over a variety of types of networks including Ethernet networks. (col.3, lines 8-11). The reference also teaches that the system is compatible with a wide variety of networking standards, thereby it teaches the systems using an Ethernet standard. (col. 4, lines 29-31). The reference Myer does not teach the control devices responding to the broadcast message on a unique time delay. The reference White teaches the control devices connected to the networks such as Ethernet (col. 1, lines 10-36, col. 3, lines 30-36 and 65-67) responding with a unique time delay. (Fig. 4 and col.4, lines 46-52). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to combine Myer with White because it would provide the network with collision avoidance mechanism resulting in minimal impact on information throughput as taught by White. Now, Keeping in mind the teachings of the reference Myer, White also teaches the sender's desired reply conditions indicated by a single byte that includes the codes including

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acknowledge after delay (Abstract, col. 7, lines 4-8 and col. 8, lines 65-67 and col. 9. lines 1-39) and, MAC address priority resolution and collision avoidance with minimal impact on packet throughput. (col. 3, lines 30-36). Thus, White teaches the use of byte (response byte) as a means to provide the controller with different types of acknowledgements including delayed acknowledgement in response to a broadcast message by the plurality of control devices. White also teaches the byte of the message by the sender includes the information that contains the sender's desired reply conditions (col.7, lines 4-8) and, that the sender expects the proper response to complete the message transaction. Also, the sender byte provides the codes for the response such as "Acknowledgement After Delay". (col.8, lines 64-67 and col.9, lines 1-39). Thus, the reference teaches that the sender's message is providing the necessary parameters for the control device's response for delaying the acknowledgement. Both references, Myer as well as White, fail to teach the use of the response byte as a counter to implement the delay in responding to the controller. The reference Flickinger teaches the use of a specific byte as a counter which can be reset. (col. 6, lines 54-56). In addition the reference Flickinger also teaches that the control byte used as a counter is reset to 0 each time the frame is transmitted by the box (controlled device.) (col.6, lines 51-56). Thus, the reference teaches that the counter byte is resettable to its original value if it is used as a counter that reaches zero. Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify Myer and White by employing Flickinger's technique of using the specific byte or bytes, in this case only the fourth byte or the fourth, fifth and sixth, of MAC addresses

of the control devices as counters which can be reset to their original value before the counter bytes begin counting down to a certain value, in this case it very well be zero, to delay the responses by the control devices. Counter byte resetting to their original value is a must because the control devices are identified by their respective MAC addresses by computer means.

Referring to claim 14,

The reference Myer fails to specifically teach the computer means as being an 8-bit processor. The reference White teaches the effective network implementation with economical micro-controllers costing under \$1. (col. 3, lines 18-24). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify Myer by employing White's low cost, 8 bit computer means rather than 32 bit, computer means because it would provide the low cost message providing efficient network for low cost applications as taught by White.

Referring to claim 15,

The reference Myer teaches the network having a hub. (Fig. 2, element 102, col.5, lines 31-33).

Referring to claim 16,

Both references, Myer as well as White, fail to teach the use of the response byte as a counter to implement the delay in responding to the controller. The reference Flickinger teaches the use of a specific byte as a counter which can be reset. (col. 6, lines 54-56). In addition the reference Flickinger also teaches that the control byte used as a counter is reset to 0 each time the frame is transmitted by the box (controlled device.) (col.6,

lines 51-56). Thus, the reference teaches that the counter byte is resettable to its original value if it is used as a counter that reaches zero. Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify Myer and White by employing Flickinger's technique of using the specific byte or bytes, in this case only the fourth byte or the fourth, fifth and sixth, of MAC addresses of the control devices as counters which can be reset to their original value before the counter bytes begin counting down to a certain value, in this case it very well be zero, to delay the responses by the control edevices. Counter byte resetting to their original value is a must because the control devices are identified by their respective MAC addresses by computer means.

Referring to claim 17,

Both references, Myer as well as White, fail to teach the use of the response byte as a counter to implement the delay in responding to the controller. The reference Flickinger teaches the use of a specific byte as a counter which can be reset. (col. 6, lines 54-56). In addition the reference Flickinger also teaches that the control byte used as a counter is reset to 0 each time the frame is transmitted by the box (controlled device.) (col.6, lines 51-56). Thus, the reference teaches that the counter byte is resettable to its original value if it is used as a counter that reaches zero. Therefore, the reference Flickinger discloses the claimed invention except for that each count last between 600 microseconds and 1 millisecond. It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the byte counter wherein each count last between 600 microseconds and 1 millisecond, since it has been held

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that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller, 105 USPQ 233.*

Referring to claim 18,

The reference Myer teaches networks including Ethernet networks with a plurality of control devices and having all control devices management functions executed by a computer means (Abstract). The reference also teaches the computer means sending a broadcast message and the control devices responding to the broadcast message. (col. 6, lines 55-67 and col.7, lines 1-9). The reference Myer teaches the controller and the computer means able to communicate over a variety of types of networks including Ethernet networks. (col.3, lines 8-11). The reference also teaches that the system is compatible with a wide variety of networking standards, thereby it teaches the systems using an Ethernet standard. (col. 4, lines 29-31). The reference Myer does not teach the control devices responding to the broadcast message on a unique time delay. The reference White teaches the control devices connected to the networks such as Ethernet (col. 1, lines 10-36, col. 3, lines 30-36 and 65-67) responding with a unique time delay. (Fig. 4 and col.4, lines 46-52) (deterministic delays generated in each control device). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to combine Myer with White because it would provide the network with collision avoidance mechanism resulting in minimal impact on information throughput as taught by White.

Conclusion

5. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok B. Patel whose telephone number is (703) 305-2655. The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on (703) 305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Abp

JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100